

# **Federal Emergency Management Agency National Urban Search & Rescue Response System**

---



## **Disaster Response in the FEMA Urban Search and Rescue System**



Presented to:  
National Institutes of Health  
School of Medicine  
Distance Learning Program  
November 2016



# Objective

---

- To discuss the National US&R Response System.
- To discuss relationship between Fire Fighting, Technical Rescue, and Urban Search and Rescue
- To highlight MD-TF1 and FEMA US&R System Activities



# System History

---

- National Urban Search & Rescue (US&R) Response System was created in response to Congressional direction after Loma Prieta earthquake in 1989
- Coordinates national capability to assist State & local governments respond to structural collapse incidents and conduct search and rescue operations
- Original solicitation
  - 25 Task Forces
  - Partnership with Sponsoring Agencies
  - Cost matching



# Play Video 1





National Urban Search & Rescue Response System

























# System Deployments

---

- Hurricanes, Tornadoes, and Typhoon
- National Special Security Events (NSSE)
- Earthquakes
- Flooding
- Grain Elevator Explosion
- Space Shuttle Recovery
- Large Commercial Building Collapse
- Terrorists Attacks
  - Murrah Federal Building
  - Pentagon
  - WTC
- Humanitarian Mission







# System Overview

---

- Codified in law (44 CFR Part 208)
- Nationally managed System
  - 28 US&R Task Forces
    - Seven Hazardous Materials Push Packages (HEPP)
  - Three US&R Incident Support Teams (IST)
    - Three IST Equipment Caches
  - US&R Technical Specialists
    - Support to State and Local Governments
  - Program Management
    - FEMA US&R Branch
    - Advisory Organization: Strategic Group, Advisory Group, & Advisory Support Group
    - Formal Decision Making Process



# System Overview

---

## US&R Readiness & Response

- FEMA Cooperative Agreements with 28 Sponsoring Agencies
  - Primarily local Fire & Rescue Departments (Readiness Agreements)
- 6,000 System members comprised of career and volunteer first responders and civilian specialists (canine handlers, physicians, structural engineers)
- During response, System members are appointed into a Temporary Excepted Federal Volunteer employment status
- Liability issues
  - Tort Liability
  - Worker's Compensation



The map illustrates the distribution of US&R divisions across the United States, categorized into three main regions:

- US&R Western Division**: Includes sites such as WA-TF1 (PUGET SOUND), CA-TF7 & HEPP-7 (SACRAMENTO), CA-TF4 (OAKLAND), CA-TF3 (MENLO PARK), CA-TF2 (LOS ANGELES CO.), CA-TF1 (LOS ANGELES CITY), CA-TF6 IST West Cache (RIVERSIDE), CA-TF5 (ORANGE CO.), and CA-TF8 (SAN DIEGO).
- US&R Central Division**: Includes sites such as UT-TF1 (SALT LAKE CITY), CO-TF1 & HEPP-5 (WEST METRO), NE-TF1 (LINCOLN), MO-TF1 (BOONE CO.), IN-TF1 & HEPP-3 (INDIANAPOLIS), OH-TF1 (MIAMI VALLEY), PA-TF1 (PHILADELPHIA), MA-TF1 (BEVERLY), NY-TF1 (NEW YORK CITY), MD-TF1 & HEPP-1 (MONTGOMERY CO.), VA-TF1 (FAIRFAX CO.), VA-TF2 IST East Cache (VIRGINIA BEACH), FL-TF1 (MIAMI-DADE), and FL-TF2 & HEPP-2 (SOUTH FLORIDA).
- US&R Eastern Division**: Includes sites such as TX-TF1 IST Central Cache HEPP-4 (COLLEGE STATION) and TN-TF1 (MEMPHIS).

The map also shows various regional codes (e.g., R-X, R-VIII, R-VII, R-VI, R-I, R-II, R-III, R-IV, R-IX) and state abbreviations (e.g., WA, OR, ID, MT, ND, SD, WY, UT, CO, NM, AZ, NV, CA, NE, KS, OK, AR, LA, MS, AL, GA, SC, NC, VA, WV, PA, NY, ME, VT, NH, CT, MA, NJ, DE, MD, DC, VA, NC, SC, GA, FL).

15



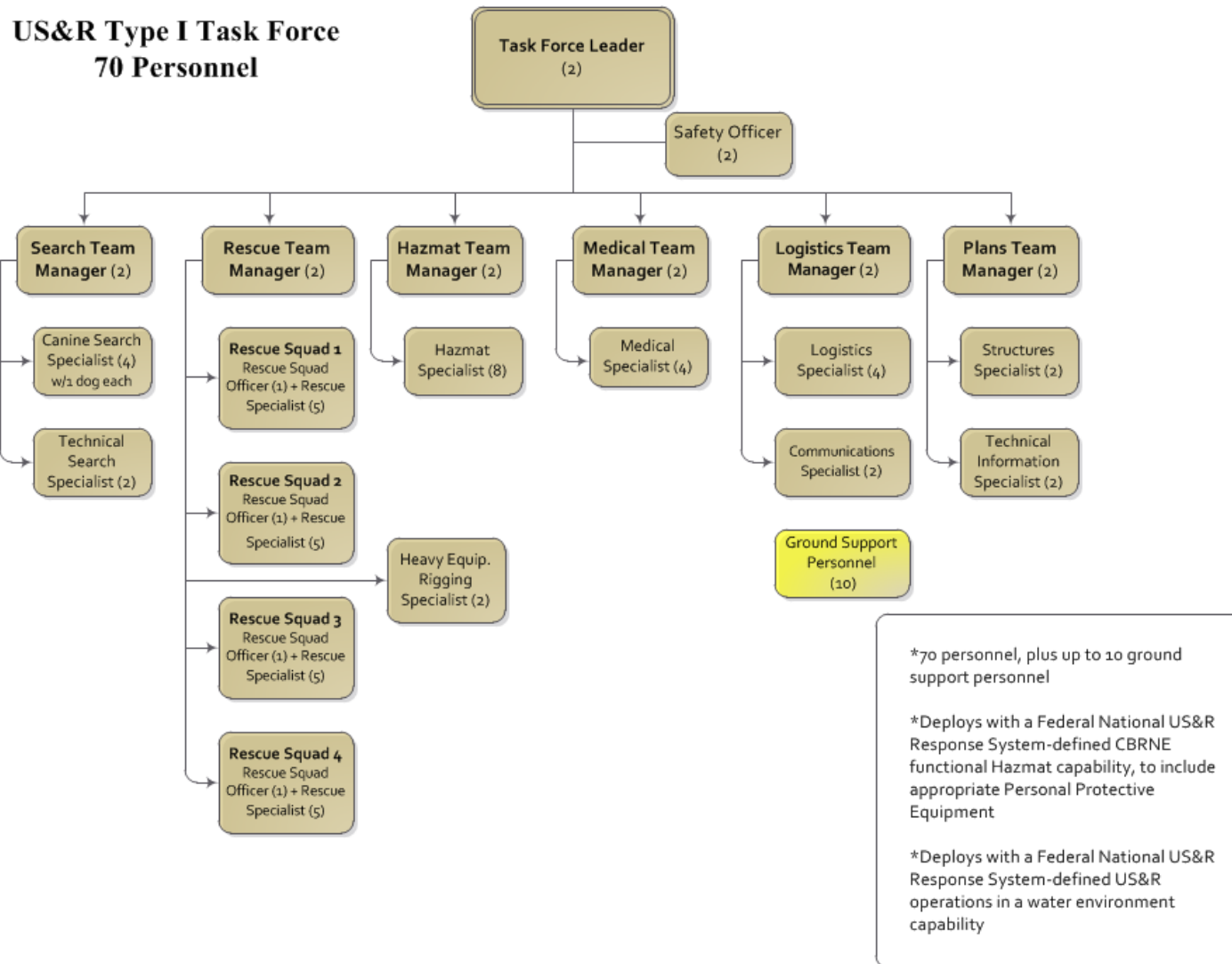
# US&R Task Force Capabilities

---

- Type I task forces are designed to perform complex search and rescue operations:
  - Collapsed structures
  - Reinforced concrete & steel
- 24-hour around-the clock operations
- Self-sufficiency for 72 hours
- Food & water for seven days
- Assemble and deploy within four to six hour window



# 2014 NIMS US&R Task Force – Type I





# Team Composition

---

Seventy person tactical unit for search and rescue operations.

- Multi disciplinary organization:
  - Search element
  - Rescue element
  - Medical element
  - Technical support element
  - WMD support element

Capable of integration into local disaster response operation as a stand alone asset or part of the local incident response.



# Capabilities - Search

- Physical
- Canine
- Acoustic
- Seismic
- Video
- Fiber optic



Equipment Cost: \$250,000





# Capabilities - Rescue

- Wood
- Steel Frame
- Unreinforced concrete
- Reinforced Concrete



Equipment Cost: \$516,000





# Capabilities - Medical

- Entrapped Victims
- Task Force Members
- Team Canine
- Physicians & Paramedics
- Equipment and drugs to handle
  - 10 critical cases
  - 15 moderate cases
  - 25 minor cases



Equipment Cost: \$379,000



# Capabilities – Technical Support

- Structural Integrity Assessment
- Hazardous Materials / WMD Assessment
- Liaison with Heavy Equipment Operators



Equipment Cost: \$260,000





# Capabilities – Operations in a Contaminated Environment

- NBC Monitoring/Sampling Equipment
- Search & Recon in WMD Environment
- Rescue Operations in WMD Environment
- Decontamination



Equipment Cost: \$725,000



# Capabilities – Communications

---

- Phone
  - Land based cellular phone
  - Satellite cellular phone
  - Land line phone system



- Radio
  - Independent portable radio communication system
  - Handheld radio's
  - Portable base stations
  - Portable repeaters
  - Aircraft radio communications
  - Marine radio Communications

Equipment Cost: \$1,610,000



# Self Sufficient - Revisit

---

Totally self sufficient for the first 72 hours of operations includes:

- Food
- Water
- Shelter
- Fuel
- Equipment
- Equipment maintenance & support
- Full equipment cache to support the task force's operations

Logistics Equipment Cost: \$2,476,000





National Urban Search & Rescue Response System



National Urban Search & Rescue Response System





National Urban Search & Rescue Response System





National Urban Search & Rescue Response System



National Urban Search & Rescue Response System









---

# How Do We Get Our Equipment on Location?







National Urban Search & Rescue Response System





National Urban Search & Rescue Response System





National Urban Search & Rescue Response System





National Urban Search & Rescue Response System



---

# How Do We Stay Sharp?





National Urban Search & Rescue Response System



Photo by Beverly Jensen





National Urban Search & Rescue Response System







National Urban Search & Rescue Response System





## Play Video 2





# Questions?

---



National Urban Search & Rescue Response System